



All About Weaving Looms With

WEAVING TODAY™

A Guide to Selecting and Using a Weaving Loom



What Loom is Right for Me?

by Madelyn van der Hoogt

When you are a new weaver and you want to weave the projects in *Handwoven* and in the other magazines and books available, it can be daunting to decide which loom you need. Here are some pointers for choosing the shaft loom that will best serve your weaving life.

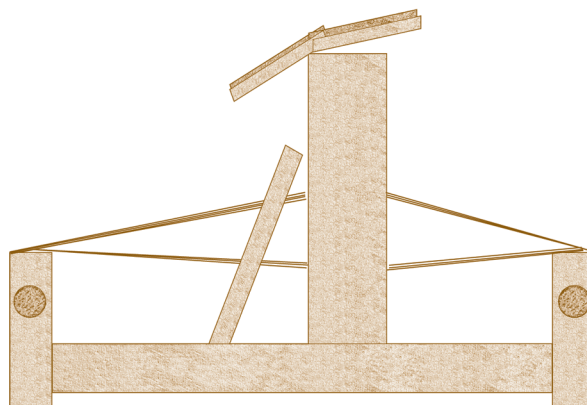
Every time I see new weavers' eyes light up as they move from one loom to another at my school, I know they will ask: "What loom should I get?" Sometimes they already have looms, either from garage sales or a first purchase made following the recommendations of other weavers. For them, the question usually is: "Do I have the right loom for me?" I have to answer their questions with a question: "What do you want to weave?" And the answer is usually: "Everything!" While I know in my heart that a lifetime is too short to weave everything, I also know that it takes some time to discover what kinds of fabrics you will love weaving most. It would help to know, however, because although you can weave *almost* everything on *any* loom, some fabrics are easier to weave successfully on one type of loom than they are on another.

When I bought my first loom, I thought I wanted to weave coverlets. As I looked through ads for looms, the only thing I was sure of was that a table loom would not be wide enough. I didn't know what a jack was, what counterbalance meant, or what difference the number of "harnesses" made. I bought my first loom based on the only word I really understood: cherry.

Here is a little guide that might help you choose a shaft loom—or understand the strengths and limitations of the loom you've already got. It is likely that your first loom will not be a dobby or a Jacquard, so this discussion is limited to table looms, jack looms, counterbalance looms, and counterbalance looms. (Rigid-heddle and inkle looms are discussed on pages 7–14 of this eBook.)

Table looms

Table-loom sheds are made by raising shafts with levers. Table looms are "rising-shed" looms, a misnomer since sheds don't rise, but the label is understood to mean that some shafts are raised and others left down to form the sheds. Table looms are portable and take up much less space than floor looms, but they are limited in weaving width (the narrower, the more portable). Some are available with many shafts (the more shafts, the longer, heavier, and less portable). Since you move a lever for every raised shaft in every shed, weaving is slow. However, you can raise *any* combination of shafts, making treading options much greater than on a floor loom. Table looms are ideal for sampling.

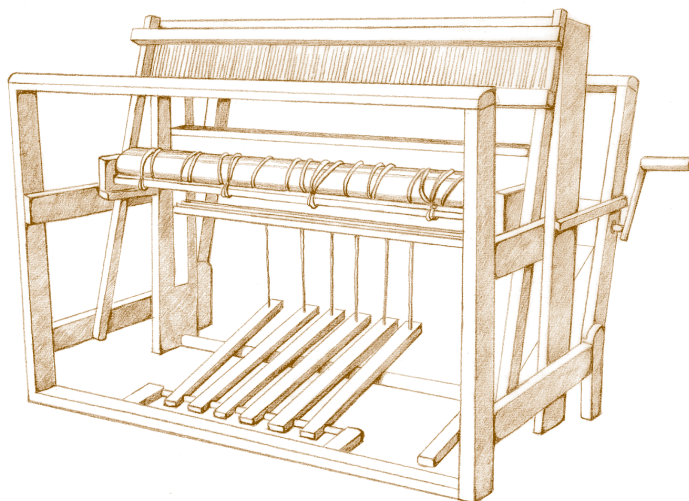


Sheds on table looms are made by operating a lever for each shaft. Some table looms come with as many as sixteen shafts.

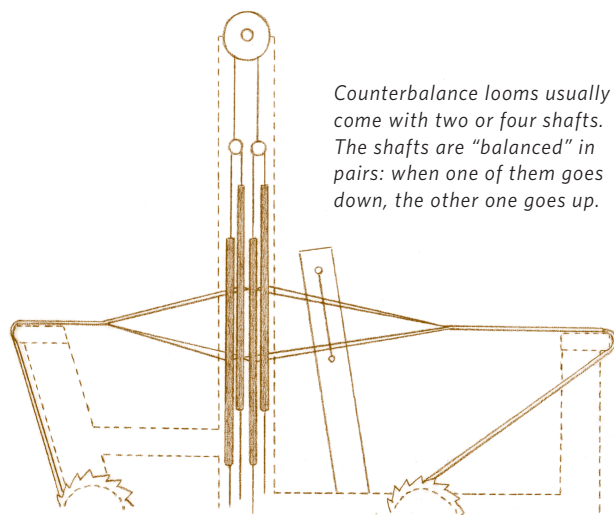


Jack looms

Sheds on jack looms are made by raising some shafts and leaving the others down—jacks (pivoting boards or levers) either pulling a shaft up when a treadle causes one end of the jack to go down or pushing them up with the same action. A jack-loom advantage is that one tie is made to a treadle for each shaft that is raised; no tie is made for shafts that stay down. A disadvantage is that the “down” shed is created by shaft weight. The shafts are usually not designed to be heavy enough to pull warp threads as far down as they are raised by the rising shafts (they would be too heavy for your foot to lift them!). The tension on raised threads is therefore tighter than on the threads that are not raised. Jack looms are not ideal for fabrics requiring tight and even tension (weft-faced rugs and wide linen fabrics) but great for most everything else. They are easy to warp and allow quick tie-up changes. The treadling on jack looms is heavier than on counterbalance or counterbalance looms—the wider the loom and the greater the number of shafts, the heavier.



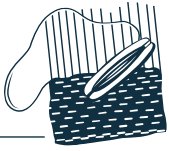
Jack looms are easy to tie up and are available with as many as sixteen shafts.



Counterbalance looms usually come with two or four shafts. The shafts are “balanced” in pairs: when one of them goes down, the other one goes up.

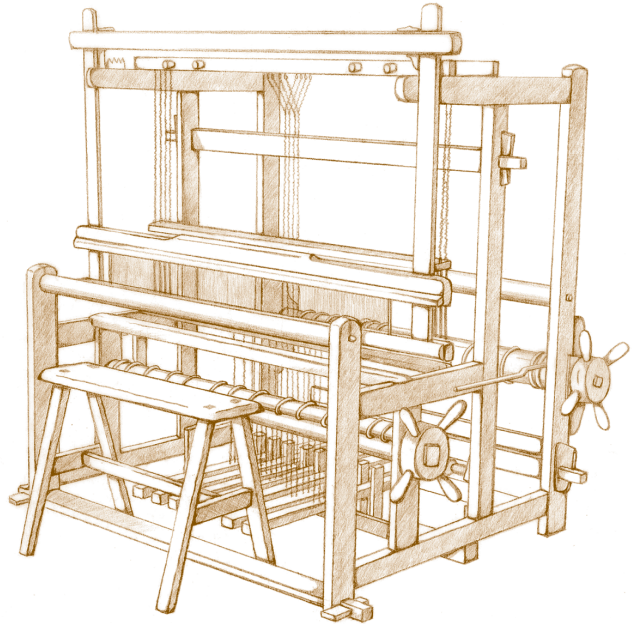
Counterbalance looms

Counterbalance looms predominated in the United States until the mid-1900s. Counterbalance looms are often called “sinking-shed” looms, another misnomer since the shed does not sink. The shafts are connected to each other, usually over pulleys. Shaft 1 is usually connected to shaft 2, and shaft 3 to shaft 4, though other combinations are possible on some counterbalance looms. The shafts tied to each treadle are pulled down by the treadle, but their connected shafts automatically go up. A disadvantage to counterbalance looms is that unbalanced sheds (one shaft vs three) can be tricky to make (though there are workarounds for some counterbalance looms). The treadling is very light, however, and the tension perfectly even on both raised and lowered warp threads. Counterbalance looms are ideal for rugs and linens and all 4-shaft weaves with balanced tie-ups (same number of shafts raised as lowered).

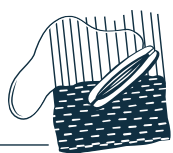


Countermarch looms

Countermarch looms are similar to counterbalance looms in that shafts go both up and down, creating even tension on raised and lowered warp threads and light treadling action. There are two sets of lamms below the shafts. Treadles tied to the upper set pull shafts down; treadles tied to the lower set pull shafts up. For each shed, a treadle is tied to an upper or lower lamm for every shaft. This makes countermarch tie-ups time-consuming, the more shafts the more time it takes. (For a fabric using twenty shafts and twenty treadles, for example, 400 ties must be made from treadles to lamms!) Also, the greater the number of shafts, the narrower the shed on most countermarch looms (ten shafts could be considered an optimum high number). Since the movement of each shaft is independent, countermarch looms can be used with unbalanced tie-ups (any ratio of shafts up to down). Most countermarch looms come with ratchet and pawl braking systems, providing maximum potential tension, ideal for rugs and linens. Countermarch looms weave almost any fabric successfully; their main drawback is time-consuming tie-up.



Countermarch looms allow unbalanced sheds, come with more than four shafts, and provide even and tight warp tension.



This Loom Loves . . .

by Madelyn van der Hoogt

You want the loom that will weave everything perfectly. Alas, one loom does not fit all. It helps, however, to know what each type of loom likes to do best.

Types of Shaft Looms

The shafts are the frames on a loom that hold the heddles. Each warp thread passes through the eye of a heddle. The position of the shaft (up or down) determines whether the warp threads it carries are above or below the weft. The opening that the weft passes through is called the shed. Shaft looms differ from each other in the way they cause the sheds to open. This mechanical difference affects the cloth: some shedding systems are better for some types of fabric, others for other types. (Loom manufacturers also build in qualities that increase a loom's efficiency and ease of use, but the shedding system is still an important factor to consider.)

• Table looms

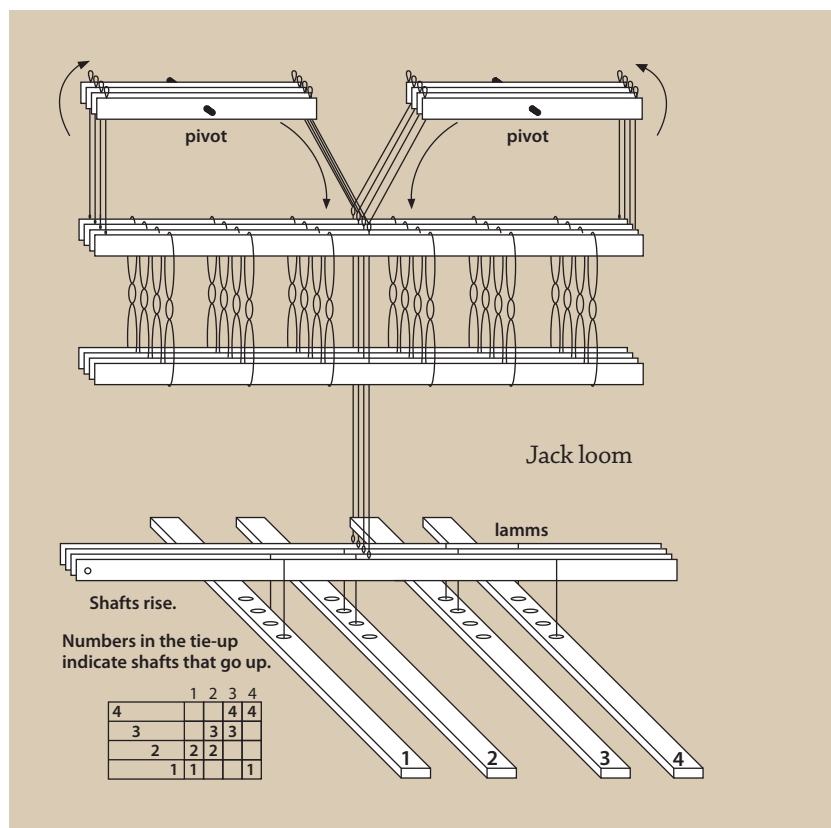
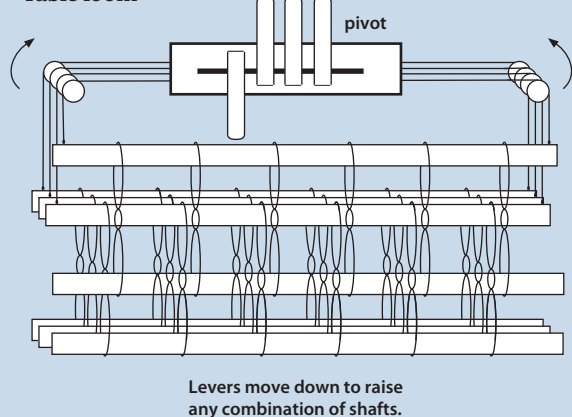
On table looms, sheds are formed by levers; one lever for each shaft. The shafts are in the down position at rest. Moving a lever (usually down) makes a shaft go up.

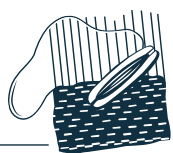
+ Table looms love to travel with you, since they are small enough to be portable and can usually sit on a table. They are ideal for workshops and for sampling, since any combination

of shafts can be raised by moving the desired levers. For table looms with more than four shafts, this allows many more possible sheds than a floor loom can since it is limited to a certain number of treadles.

— Table looms do not have the weight or heft required by fabrics with a densely packed weft. They are slow to use, since you have to choose and move the levers for each pick with your hands, take the shuttle through the shed, and then release the levers with your hands. And, of course, they do not allow weaving a very wide or very long fabric.

Table loom



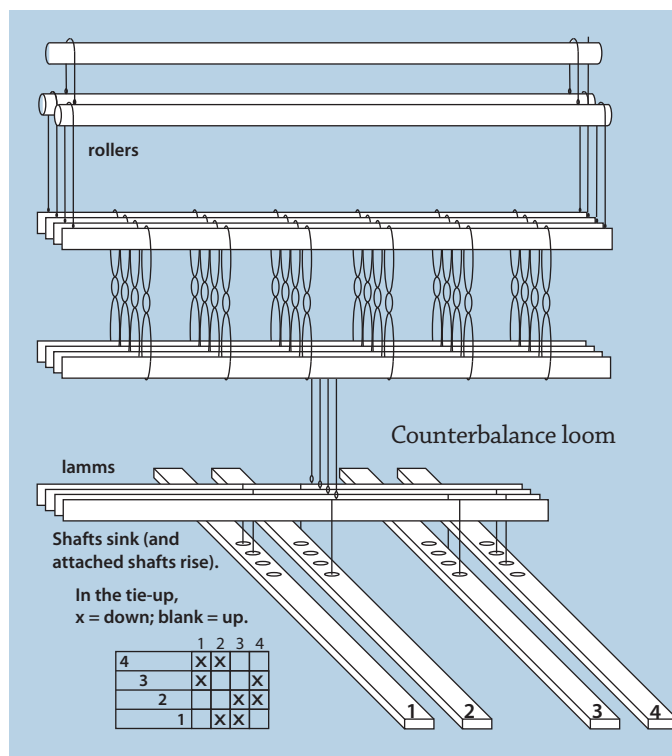


• Jack looms

Jack looms are sometimes called “rising-shed” looms. This is a misnomer, since the shafts on a jack loom rise, not the sheds. On jack looms, “jacks” are attached to each side of each shaft, either above the shafts or below them. The jacks pivot, so that when a treadle brings down one side of the jack, the other side rises to pull or push the shaft up. At rest, all shafts are in the down position.

+ Most jack looms are easy to tie up since the treadles are only tied to move shafts that rise. There are more jack looms made than any other type of loom, so a wide range of choices are available: weaving widths, general size and weight, numbers of shafts (as many as twenty-four), materials of construction, price, and many special features. Jack looms can be used with skeleton tie-ups (more than one treadle is depressed together) to increase the number of possible combinations of sheds beyond the limited number of treadles.

— Since the shafts at rest are down, shaft weight is required to pull the warp down out of what would be the center of the shed. For the warp to be pulled down as much as it is raised when the shafts are raised, considerable shaft weight is required, making the treadling on shaft looms heavy, especially if many shafts are tied to a single treadle. To avoid heavy treadling, shaft weight on most jack looms is not designed to be



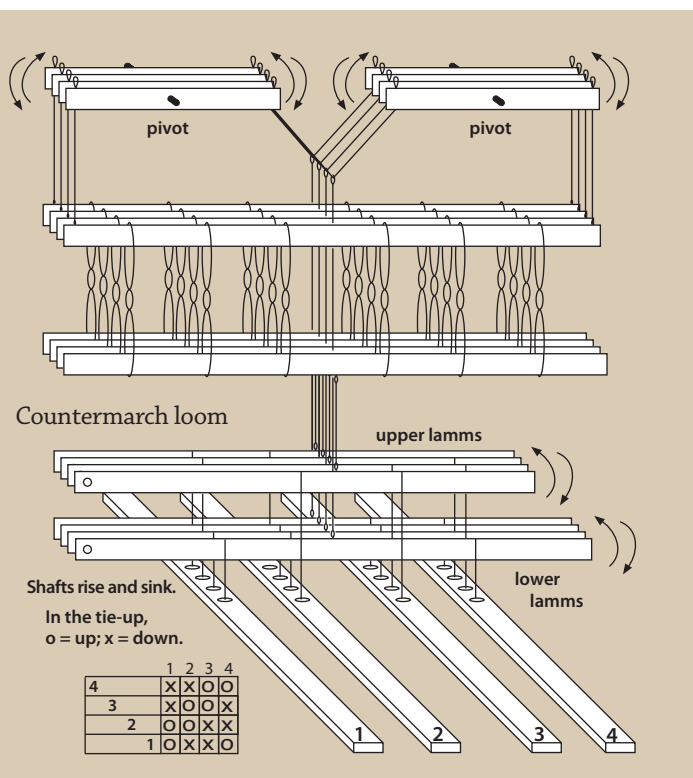
heavy enough to pull threads as far down from center as they are raised, making the warp threads in the bottom of the shed looser than the raised threads (and for this reason requiring a shuttle race). Maximum tension is not possible (it would pull the “down” threads back up to center). Jack looms, therefore, do not allow packing the weft as firmly as counterbalance and counterbalance looms.

• Counterbalance looms

Counterbalance looms are sometimes called “sinking-shed” looms. This is also a misnomer. Each shaft is connected to another shaft via pulleys above the shafts. When a treadle is depressed, the shafts tied to it go down, but the shafts connected to these shafts are pulled up. An additional set of pulleys above the first set allows a pair of shafts to operate against another pair.

+ Treadling is light and easy because shaft weight is not a factor. The warp at rest is in the center of the shed and pulled equally up and down by sinking and rising shafts. Maximum warp tension therefore is possible, and the tension is equal for raised and lowered threads. Counterbalance looms love to weave firm fabrics such as rugs and work well with nonresilient fibers such as linen.

— Some counterbalance looms do not form clean unbalanced sheds (one shaft moving against three, for example). Counterbalance looms are usually limited to two or four shafts.





● **Countermarch looms**

Countermarch looms are equipped with two sets of lamms (the crosspieces that connect treadles to shafts). A tie to a lower lamm causes a shaft to rise; a tie to an upper lamm causes a shaft to sink. At rest, the warp is in the middle of the shed. When a treadle is depressed, all the shafts are moved, either up or down.

+ Countermarch looms, similarly to counterbalance looms, provide light treadling with maximum warp tension and equal tension on raised and lowered warp threads. Countermarch looms love to weave all types of fabrics including rugs and work well with dense warps and nonresilient fibers. Countermarch looms can be equipped with as many as twenty shafts.

— Every shaft must be tied to go either up or down to form the

shed, so for most tie-ups, every treadle must be tied to move every shaft (64 ties for eight shafts and eight treadles; 400 for twenty of each!). For multishaft tie-ups, some skill is required to achieve a clean shed. Skeleton tie-ups can be used on countermarch looms (though not with nearly the versatility as with jack looms). The only rules are that all shafts must be tied to move (or threads will hang in the middle of the shed), and you cannot use treadles together that ask a shaft to move both up and down. (Summer and winter tie-down shafts can be tied to separate treadles from the pattern shafts, for example.)

Probably the best answer to the question “What loom should I get?” is: More than one!



Getting Started on a Rigid-Heddle Loom

by Chris Switzer



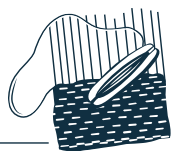
A rigid-heddle loom is just the ticket for small projects such as scarves. The scarf on the loom has a warp of camel-colored alpaca and a weft of variegated loop wool/mohair in turquoise, mauve, and rust. The dark scarf uses charcoal alpaca for warp and variegated brushed-wool weft in blue, rust, and charcoal for weft. The light scarf has a mixed warp wound six strands at a time: one strand each of pink wool bouclé, mauve/pink rayon/wool blend, white rayon/wool loop, and two-ply white alpaca, and two strands of three-ply natural white alpaca. Its weft is pale pink brushed wool/mohair.

The rigid-heddle loom is a great loom for beginners. It's easy to warp and thread, and it accommodates a variety of widths and lengths of cloth. Projects that can be woven on rigid-heddle looms include placemats and table runners, shawls and stoles, pillows, purses and tote bags, tops, and belts—practically any medium-weight fabric that's the width of the loom or narrower.

Rigid-heddle looms are portable, lightweight,

and sturdy. Even if you have another loom, a rigid-heddle loom can be a mainstay. It's good for traveling because it comes apart easily for carrying. It's excellent for demonstrating weaving at fairs and exhibits. It's good to use with children. And it's easy and quick to set up.

Rigid-heddle looms come in narrow widths: the average width is about 20" with a range from 11" to 40". I'd suggest purchasing the widest looms only if you are fairly large



and have long arms because there is a lot of reaching to maneuver the long shuttle through the shed. Heddles are available in 8-, 10-, and 12-dent spacings, limiting the setts that you can use without special techniques. Because of the alternation of warp ends in the heddle's slots and eyes, the basic weave structure is plain weave, although other weave structures, such as huck lace and spot and lace Bronson, are possible with a pick-up stick. Finger-manipulated techniques such as leno, Spanish lace, and Danish medallion add variety. By using fine yarns for weft, tapestry or weft-faced fabrics may be woven.

Color and texture enliven rigid-heddle textiles. The simple weave structure shows off yarn, especially contrasts between smooth and slubby, shiny and matte, and fine and heavy yarns. This is a perfect place to use odd balls of color-washed loop or brushed knitting yarn that you couldn't resist buying even though you didn't know what you were going to do with it. Colors can be muted or bright, subtle or contrasting, striped or plaid.

Try an easy scarf as a first project or to get you back to your loom after a hiatus. This scarf requires only two balls of yarn, one each for the warp and weft. Add more colors, and you'll need even less of each one.

An Alpaca Scarf to Weave

Your scarf will require 165 yd of alpaca for warp and 125 yd (a 50-gram ball) of textured knitting yarn for weft. Measure out a 2 yd warp of 73 strands (if you run short, make 71 or 69 ends). Use a warping board, warping pegs clamped to a table, or improvise with chair legs, doorknobs, or whatever else is handy. Because you're making a short warp with few warp ends, a cross is not necessary. Tie the warp tightly about 18" from one end, cut the end loops, and thread the ends through a 10-dent heddle from the front, centering it from side to side and starting and ending with a doubled yarn in a slot. Check the tie-on dowel at the back of the loom (the heddle holder is closer to the back of the loom than the front) by unrolling it to the extent of its cords and rerolling it in the direction that allows the brake to hold it firmly (if wound in the wrong direction, the brake won't hold). Tie the ends that you've just threaded onto the back beam. For each tie-on knot, smooth two groups of four ends each so that they are all equal in length. Bring both groups under the dowel, separate them and bring each group up to the outside and over the dowel, cross them beneath the groups, bring them to the top, and tie in a half-knot.

When all groups have been tied (the last group will have five ends), you're ready to

Here's my favorite recipe for an Alpaca Scarf

FINISHED DIMENSIONS: 7" wide by 58" long, plus 3" fringe at each end.

YARNS: Warp—Three-ply alpaca at 1,330 yd/lb: 165 yd natural white, camel, mist gray, and charcoal. Weft—Four-ply 50%

alpaca/50% wool at 1,000 yd/lb: 125 yd in color of your choice.

E.P.I.: 10. Use a 10-dent heddle.

WIDTH IN REED: 7". Start and end with a doubled end in a slot.

TOTAL WARP ENDS: 73, including a doubled end at each side.

WARP LENGTH: 2 yd, including take-up, shrinkage, and 18" loom waste. Part of the loom waste is used for fringe.

P.P.I.: 10.



wind the warp onto the back beam. You'll need pieces of brown paper cut from grocery sacks to wind between the layers of warp. Cut them about 7" wider than the warp (about 14" wide for the scarf) so that the warp ends on each side won't slide off and disrupt the tension on the warp. The length of the paper is less critical; you'll need a total of about 1 yd, but short pieces can be used one after the other and can be easier to handle.

Undo the tie around the warp, hold the warp taut with your left hand, and with your right hand turn the knob on the back beam to roll on the warp, inserting the paper beneath the warp as it rolls on. Overlap pieces of paper as needed. Stop winding on when the end of the warp is even with the front of the loom.

Unroll and check the front tie-on dowel as you did the back, reroll it, and position it about 10" from the heddle so that you can tie on the end of the warp. Smoothing the warp from the heddle toward yourself, tie on pairs of four-end groups by bringing all eight ends over the dowel, then under it, half to each side, up and over, and tie a half-knot on top of the group. When all the ends have been tied on, test the tension by pressing down on each group in turn between the front dowel and the heddle. Tighten the loose groups until each group is equally springy and then tie a second half-knot on each to make a square knot.

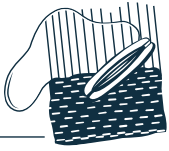
Wind a 16" stick shuttle with about 2 yd of scrap yarn to weave the heading. (The stick shuttle can be of any length just so that it's longer than the warp is wide so that you can grab the end emerging from the shed while you're still holding onto the other end.) Place the heddle in the holder for the up shed and notice that the warp separates into two layers: the upper one formed by the ends threaded through the eyes and the lower one by the ends threaded through the slots.

Pass the shuttle through the shed from one side or the other, leaving yarn in the shed and a tail about 3" long extending from the edge. Put down the shuttle next to the loom or in your lap, and with both hands, one placed toward either end of the heddle, lift the heddle from the holder and bring it toward you to press the weft row in place. Don't push too tightly against the knots.

To form the next shed, the down shed, push the heddle back to the holder, but let it hang on the warp. The shed is formed with the ends threaded through the eyes on the lower layer and the slot ends on the upper layer. Pick up the shuttle and pass it through the shed. Lay the shuttle down and position the weft so that it wraps closely around the selvedge at the beginning of the row and lies in the shed in a shallow curve or a straight line slightly angled toward the heddle. Press the weft in place by using both hands to bring the heddle toward you against the cloth. Continue for a few more rows until the warp ends are evenly spaced across the width and there is about 6" for fringe.

Remove any remaining scrap yarn from the shuttle and wind the shuttle with the weft yarn. Beat in four shots tightly, one at a time, to give stability to the edge. Then place successive weft shots $\frac{1}{4}$ " apart to produce a pliable fabric that will lie softly around the neck. The spaces between the rows should form little squares. Beating too hard squashes the squares, makes a stiff fabric, and eats up the weft too quickly, whereas beating too gently leaves elongated rectangles between the rows and makes a flimsy fabric. Continue to wrap the weft smoothly and evenly around each side of the scarf.

When the weaving approaches the heddle, advance the warp about 6". To keep the tension even, wind on at the front of the loom while you unwind at the back. When the back tie-on dowel approaches the



heddle, you're almost finished with the weaving. Beat four rows tightly as you did at the beginning and weave a few rows of scrap yarn to hold the last rows of weaving in place. Untie the warp ends at the back tie-on dowel, pull the scarf and fringe allowance from the heddle, unroll the front beam, and untie the knots at that end.

Remove the scrap yarn at one end and tie overhand knots for fringe in groups of four warp ends. Repeat at the other end. Trim the fringe evenly to 3". Wash the scarf by hand in cool water with mild liquid detergent, rinse, and then rinse again with a little fabric softener in the water. Roll the scarf in a towel, knead it to remove moisture, and then hang to dry. Steam-press lightly.

Congratulations! You've made a scarf! Now that was a snap, wasn't it?

CHRIS SWITZER, Estes Park, Colorado, raises llamas and alpacas and finds that weaving scarves on a rigid-heddle loom is a good way to acquaint people with alpaca fiber.

Further Reading

Davenport, Betty Linn, *Hands On Rigid Heddle Weaving*. Loveland, Colorado: Interweave, 1987.

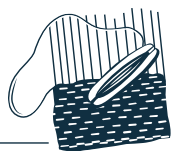
Patrick, Jane, *The Weaver's Idea Book: Creative Cloth on a Rigid-Heddle Loom*. Loveland, Colorado: Interweave, 2011.

Gibson, Liz, *Weaving Made Easy: 17 Projects Using a Simple Loom*. Loveland, Colorado: Interweave, 2008.

Davenport, Betty Linn, *Best of Handwoven: New Technique Series: Rigid Heddle Pattern Book 1*, PDF. Loveland, Colorado: Interweave, 2010.

van der Hoogt, Madelyn, *Warping Your Loom*, DVD. Loveland, Colorado: Interweave, 2010.

Patrick, Jane, *Weaving on a Rigid Hedle Loom*, DVD. Loveland, Colorado: Interweave, 2011.



Make a Loom and Weave a Hatband in Two Days without Breaking the Bank

by Sharon Kersten

Here's how to construct a loom, warp it, and weave a project all within a weekend. This lightweight, portable loom is suitable for small projects such as hatbands and bookmarks. It can easily be disassembled for travel when needed!

To build this loom, you'll need to gather a few basic hand tools and take a trip to your local hardware store or "big-box" home improvement center.

Making the loom

Cut the CPVC (chlorinated polyvinyl chloride) pipe into two 16" front pieces, two 2½" back pieces, seven 6" crosspieces, three 5" pieces for castle uprights and heddle string rod, six 1½" pieces for joining T and L connectors, and one 7" shed rod. Push pieces together as shown on page 12.

For the tensioning device: Arrange on each 24" threaded rod: 4" space, washer, 2 nuts,

9" space, 2 nuts, washer, and about a 10" space. The 4" space goes into the back arm; the 10" space into the castle assembly. (The washers keep the nuts from sliding inside the T connector.) Snug the 2 nuts so they are finger tight only. Moving the two sets of nuts toward each other loosens the tension, away from each other tightens the tension. (Place elastics as in Photo a, page 14, to prevent the loom from coming apart when it is not warped.)

Using a ruler, measure from washer to washer to check that both sides of the loom are the same length. The measurements should be within ⅛" of each other.



What you'll need

Tools

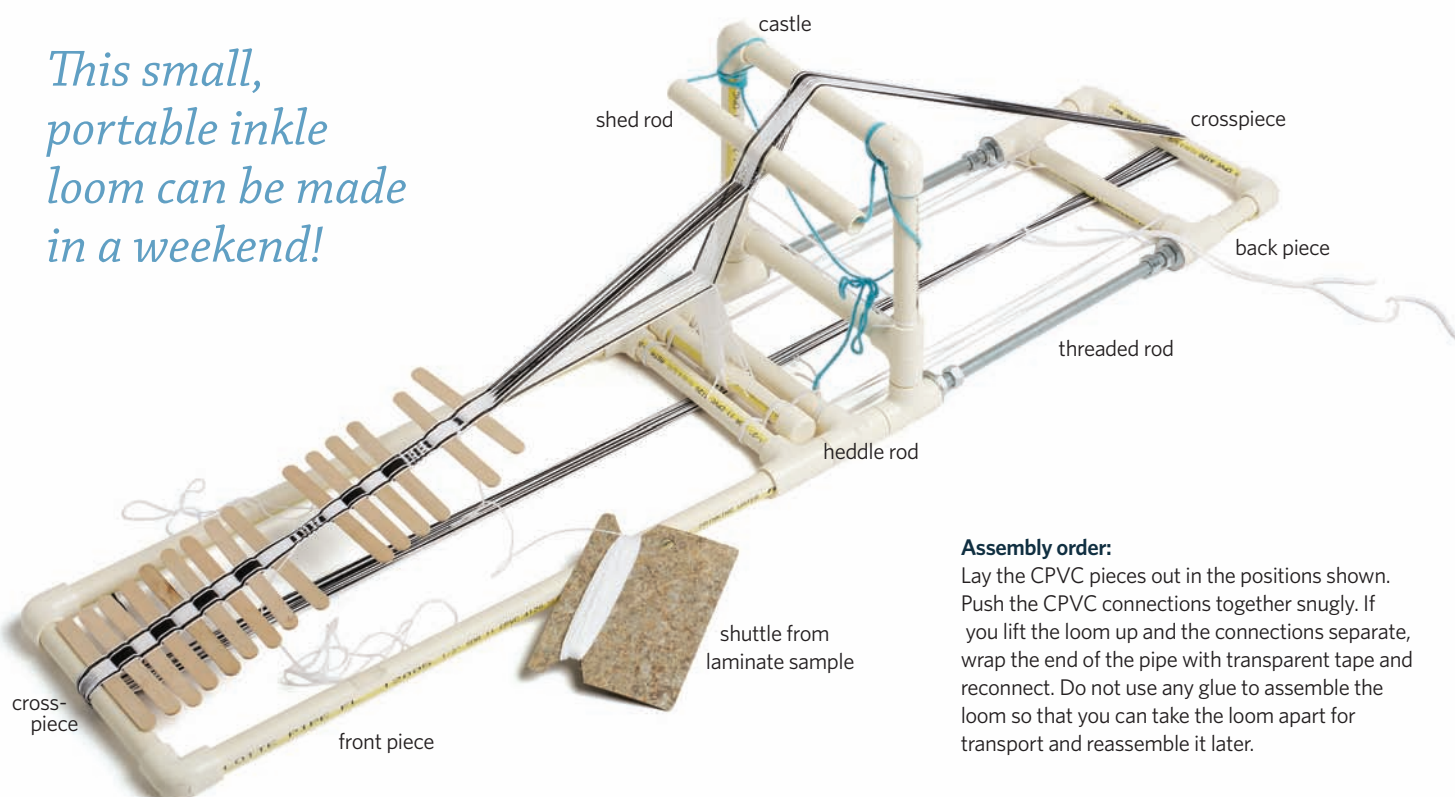
Coping saw, hacksaw, miter box and saw, or PVC pipe cutter (if available); utility knife; *not-your-sewing* scissors; tape measure or ruler; pencil; slip-jaw pliers (to loosen any stuck pipes, if needed).

Materials and other supplies

One 10 ft length ½" CPVC pipe (you can cut it in half to transport), ten ½" T connectors, six ½" L connectors, two ½" cap pieces, two ⅜" × 24" threaded rods (20 threads/inch), 8 nuts to fit threaded rod, 4 washers with bigger outside diameter than ends of T connectors, transparent tape, 2 packages of ¼" elastic cord.



*This small,
portable inkle
loom can be made
in a weekend!*



Assembly order:

Lay the CPVC pieces out in the positions shown. Push the CPVC connections together snugly. If you lift the loom up and the connections separate, wrap the end of the pipe with transparent tape and reconnect. Do not use any glue to assemble the loom so that you can take the loom apart for transport and reassemble it later.



1. Threading

W B B W B B B B B B B W B B W open
 W B B W W W W W W W W W W W B B W heddle

(Discard the extra black thread.)

1

Tie 20 heddles (3 extra for repairs or other projects) around the castle upright (Photo c, page 14) with a surgeon's knot (a square knot with two twists on the first half).

2

Taping the ends on the bottom front cross-piece with 6" tails at start and finish, wind a continuous warp of 34 ends holding 1 black/1 white together and keeping a finger between them; do not cross threads as you wind.

3

Weave in popsicle sticks (Photo d, page 14), picking up the sheds by hand and changing the black/white alternate order to match Figure 1. Slide sticks to bottom of loom frame, smoothing the threads. Discard the extra black thread and tie together end tails.

4

Attach and secure the shed rod (Photo e, page 14). Push the lower shed down. Insert popsicle sticks to keep the shed down while you are working. Loosen the heddle rod from its elastic (Photo b, page 14) and place it about halfway between the end of the loom and the castle upright. Slip one end of each string heddle around the heddle rod, pass the doubled string of the loop over one warp thread in the lower shed, then pass the other end of the loop around the heddle rod (Photo f, page 14). Continue, taking threads from the lower shed in order and making sure you catch only one thread at a time. Then carefully slide the heddle rod back to the bottom of the castle and secure it with the elastics (Photo b, page 14).

5

Cut a shuttle from laminate sample (see page 12). Weave at least 7" plain weave with popsicle sticks to preserve the fringe. Weave 1" plain weave with white weft (the heddle rod in the down position lowers the mostly light warp threads so the mostly dark threads are on top; the heddle rod released and the shed stick moved forward raises the mostly light threads). Hemstitch over the first 2 rows. Then weave the hatband following Figure 2.

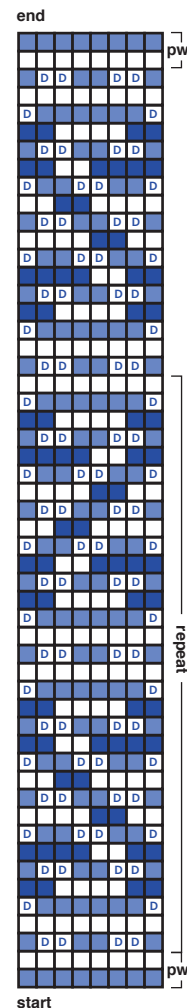
6

To weave the pattern: Copy and enlarge the graph in Figure 2 so you can read it easily and use a marker to check off each row. Weave the pattern repeat for about 25" or the length necessary for your use. The graph shows only warp threads 10–25 (count them from the right); the others are controlled by the sheds and not the pick-up stick. The first few rows will look strange the first time through. Stop for breaks only between "S" motifs (it takes 10 to 15 minutes to weave each one). End with 1" plain weave and hemstitch as at the beginning. Weave another 7" of popsicle sticks for fringe and then weave the remaining warp for bookmarks or samples.

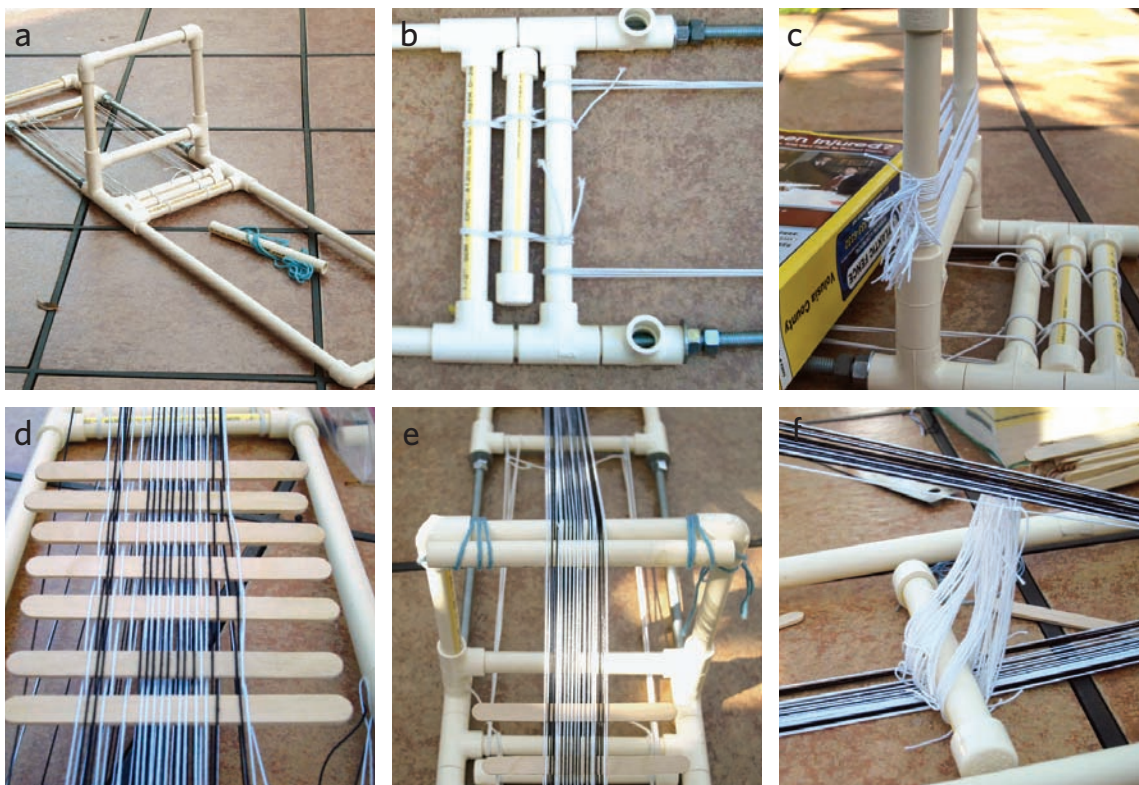
7

Remove the band from the loom. Divide the warp threads into two halves, then do a 3- or 4-strand braid with each half and secure with an overhand knot, matching all braids for length and knot placement; trim ends evenly.

2. Pick-up pattern



- thread up in regular shed (heddle down)
- thread up in regular shed using shed stick
- thread brought up with pick-up stick
- thread pushed down with pick-up stick



PHOTOS BY SHARON KERSTEN

Assembly and warping

a. Assembled frame and placement of elastics, b. the heddle rod, c. the heddles tied around castle (the loom is weighted with a large telephone book), d. sheds to straighten thread order, e. the shed rod, f. the position for heddle rod during threading. (For assembled and warped loom, see page 12; a different pattern from the hatband is being woven.)

Structure

Warp-faced plain weave with pick-up.

Equipment

Inkle loom to accommodate at least a 4 ft warp length (this loom allows 80"); smooth string or strong sewing thread for tying heddles; popsicle sticks; kitchen laminate samples to use as shuttles; small pick-up stick.

Yarns

Warp: #10 cotton crochet thread or 5/2 pearl cotton, 25 yd white and 25 yd black (or DMC embroidery floss, 4 skeins light, 4 skeins dark).

Weft: same as light warp, about 8 yd.

Other supplies

See list of supplies and materials for constructing the inkle loom.

Warp length

34 ends alternating 1 dark/1 light 80" long (this length will depend on the inkle loom).

Setts

Warp: about 45 epi.
 Weft: about 13 ppi.

Dimensions

Weaving width: $\frac{3}{4}$ ". Woven length: 26". Finished size: hatband $\frac{3}{4}$ " 26" plus 5" braided fringe at each end.